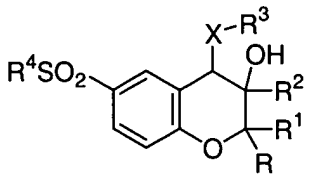
What is claimed is:

1. A method of treating an alopecia selected from the group consisting of alopecia areata, female pattern hair loss, hair loss secondary to chemotherapy or radiation treatment, stress-related hair loss, self-induced hair loss, scarring alopecia, and alopecia in non-human mammals, the method comprising administering to a mammal who has experienced or is considered at risk for experiencing the alopecia an effective amount of a compound of formula (I)



(I)

or a pharmaceutically acceptable salt thereof, wherein

X is O, S or NH;

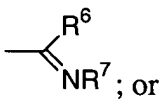
R and R^1 are each independently selected from H and C_1-C_4 alkyl or taken together represent C_2-C_6 alkylene;

R^2 is H or C_1 -C_4 alkyl;

R^3 is

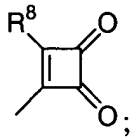
(a) a 6-membered heterocyclic ring containing 1 or 2 N heteroatoms, said ring being linked to X by a ring carbon atom, optionally benzo-fused and optionally substituted, including in the benzo-fused portion, by C_1-C_6 alkyl, hydroxy, -OR^5, halo, -$S(O)_mR^5$, oxo, amino, -NHR^5, -$N(R^5)_2$, cyano, -CO_2R^5, -$CONH_2$, -$CONHR^5$, or -$CON(R^5)_2$, with the proviso that R^3 is not an N-(C_1-C_6 alkyl)pyridonyl group;

(b) when X is NH, a group of the formula:



; or

(c) when X is NH, a group of the formula:



;

R^4 is phenyl substituted by a hydroxy group and optionally further substituted by

1 or 2 substituents each independently selected from hydroxy, C_1-C_6 alkyl, -OR^5, halo, cyano and nitro;

R^5 is C_1-C_6 alkyl;

R^6 is -OR^5, -NHR^5, -$N(R^5)_2$, -SR^5 or -NHR^9 ;

R^7 is cyano;

R^8 is -OR^5, -NHR^5, -$N(R^5)_2$ or -NHR^9 ;

R^9 is phenyl optionally substituted by C_1-C_6 alkyl, hydroxy, -OR^5, halo, cyano or nitro; and

m is 0, 1, or 2.

2. The method of claim 1, wherein R^3 is a 6-membered heterocyclic ring containing 2N heteroatoms, said ring being linked to X by a ring carbon atom, optionally benzo-fused and optionally substituted, including in the benzo-fused portion, by C_1-C_6 alkyl, hydroxy, -OR^5, halo, -$S(O)_mR^5$, oxo, amino, -NHR^5, -$N(R^5)_2$, cyano, -CO_2R^5, -$CONH_2$, -$CONHR^5$, or -$CON(R^5)_2$, with the proviso that R^3 is not an N-(C_1-C_6 alkyl)pyridonyl group.

3. The method of claim 2, wherein

X is O or NH;

R, R^1, and R^2 are each C_1-C_4 alkyl;

R^3 is a 6-membered heterocyclic ring containing 2N heteroatoms, said ring being optionally benzo-fused and optionally substituted, including in the benzo-fused portion, by C_1-C_4 alkyl, hydroxy, halo, or oxo; and

R^4 is phenyl substituted by 1 or 2 hydroxy groups.

4. The method of claim 3, wherein

X is O;

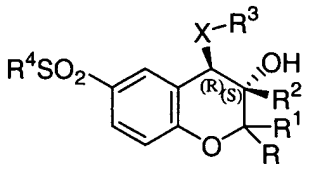
R, R^1, and R^2 are each methyl;

R^3 is 3-hydroxypridazin-6-yl, 2,3-dihydro-2-methyl-3-oxopyridazin-6-yl, 2,3-dihydro-2 ethyl-3-oxopyridazin-6-yl, 1,2-dihydro-1-oxo-2H-phthalazin-4-yl, 1,2-dihydro-2-methyl-1-oxophthalazin-4-yl, or 2-chloropyrimidin-4-yl; and

R^4 is 2-hydroxyphenyl, 3-hydroxyphenyl, 4-hydroxyphenyl or 3,4-dihydroxyphenyl.

5. The method of claim 4, wherein R^3 is 2,3-dihydro-2-methyl-3-oxopyridazin-6-yl and R^4 is 3-hydroxyphenyl or 4-hydroxyphenyl.

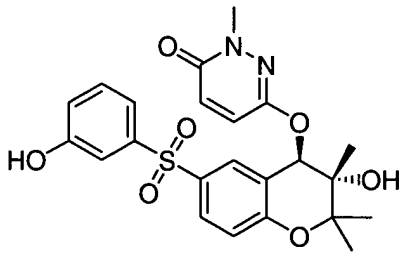
6. The method of claim 1, wherein the compound of formula (I) has the configuration shown in formula (IA)



(IA)

7. The method of claim 1, wherein the compound of formula (I) is selected from the group consisting of 3,4-dihydro-4-(2,3-dihydro-2-methyl-3-oxopyridazin-6-yl)oxy-3-hydroxy-6-(3- hydroxyphenyl)sulphonyl-2,2,3-trimethyl-2H-benzo[b]pyran; 3,4-dihydro-4-(2,3-dihydro-2-methyl-3-oxopyridazin-6-yl)oxy-3-hydroxy-6-(4-hydroxyphenyl)sulphonyl-2,2,3-trimethyl-2H-benzo[b]pyran; and (3S,4R)-stereoisomeric forms thereof.

8. The method of claim 1, wherein the compound of formula (I) is (3S,4R)-3,4-dihydro-4-(2,3-dihydro-2-methyl-3-oxopyridazin-6-yl)oxy-3-hydroxy-6-(3-hydroxyphenyl)sulphonyl-2,2,3-trimethyl-2H-benzo[b]pyran of formula (II)



(II)

9. The method of claim 1, wherein the compound of formula (I) or a pharmaceutically acceptable salt thereof is administered in the form of a composition further comprising a pharmaceutically acceptable carrier, diluent, or excipient.

10. The method of claim 9, wherein the composition is administered topically to a target area on the mammal.

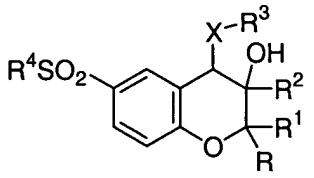
11. The method of claim 10, further comprising the step of removing the composition from the target area after administration.

12. The method of claim 1, wherein the mammal is a human.

13. The method of claim 12, wherein the alopecia is selected from the group consisting of alopecia areata, female pattern hair loss, hair loss secondary to chemotherapy or radiation treatment, stress-related hair loss, self-induced hair loss, and scarring alopecia.

14. The method of claim 1, wherein the mammal is non-human.

15. A pharmaceutical composition for an alopecia selected from the group consisting of alopecia areata, female pattern hair loss, hair loss secondary to chemotherapy or radiation treatment, stress-related hair loss, self-induced hair loss, scarring alopecia, and alopecia in non-human mammals comprising a pharmaceutically acceptable carrier in admixture with an effective amount of a compound of formula (I)



(I)

or a pharmaceutically acceptable salt thereof, wherein

X is O, S or NH;

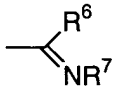
R and R^1 are each independently selected from H and C_1-C_4 alkyl or taken together represent C_2-C_6 alkylene;

R^2 is H or C_1 -C_4 alkyl;

R^3 is

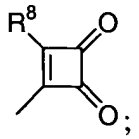
(a) a 6-membered heterocyclic ring containing 1 or 2 N heteroatoms, said ring being linked to X by a ring carbon atom, optionally benzo-fused and optionally substituted, including in the benzo-fused portion, by C_1-C_6 alkyl, hydroxy, -OR^5, halo, -$S(O)_mR^5$, oxo, amino, -NHR^5, -$N(R^5)_2$, cyano, -CO_2R^5, -$CONH_2$, -$CONHR^5$, or -$CON(R^5)_2$, with the proviso that R^3 is not an N-(C_1-C_6 alkyl)pyridonyl group;

(b) when X is NH, a group of the formula:



; or

(c) when X is NH, a group of the formula:



R^4 is phenyl substituted by a hydroxy group and optionally further substituted by 1 or 2 substituents each independently selected from hydroxy, C_1-C_6 alkyl, -OR^5, halo, cyano and nitro;

R^5 is C_1-C_6 alkyl;

R^6 is -OR^5, -NHR^5, -$N(R^5)_2$, -SR^5 or -NHR^9 ;

R^7 is cyano;

R^8 is -OR^5, -NHR^5, -$N(R^5)_2$ or -NHR^9 ;

R^9 is phenyl optionally substituted by C_1-C_6 alkyl, hydroxy, -OR^5, halo, cyano or nitro; and

m is 0, 1, or 2.

16. The pharmaceutical composition of claim 4 in which said carrier is suitable for topical administration.

17. The pharmaceutical composition according to claim 6 in which said compound is (3S,4R)-3,4-dihydro-4-(2,3-dihydro-2-methyl-3-oxopyridazin-6-yl)oxy-3-hydroxy-6-(3-hydroxyphenyl)sulphonyl-2,2,3-trimethyl-2H-benzo[b]pyran.